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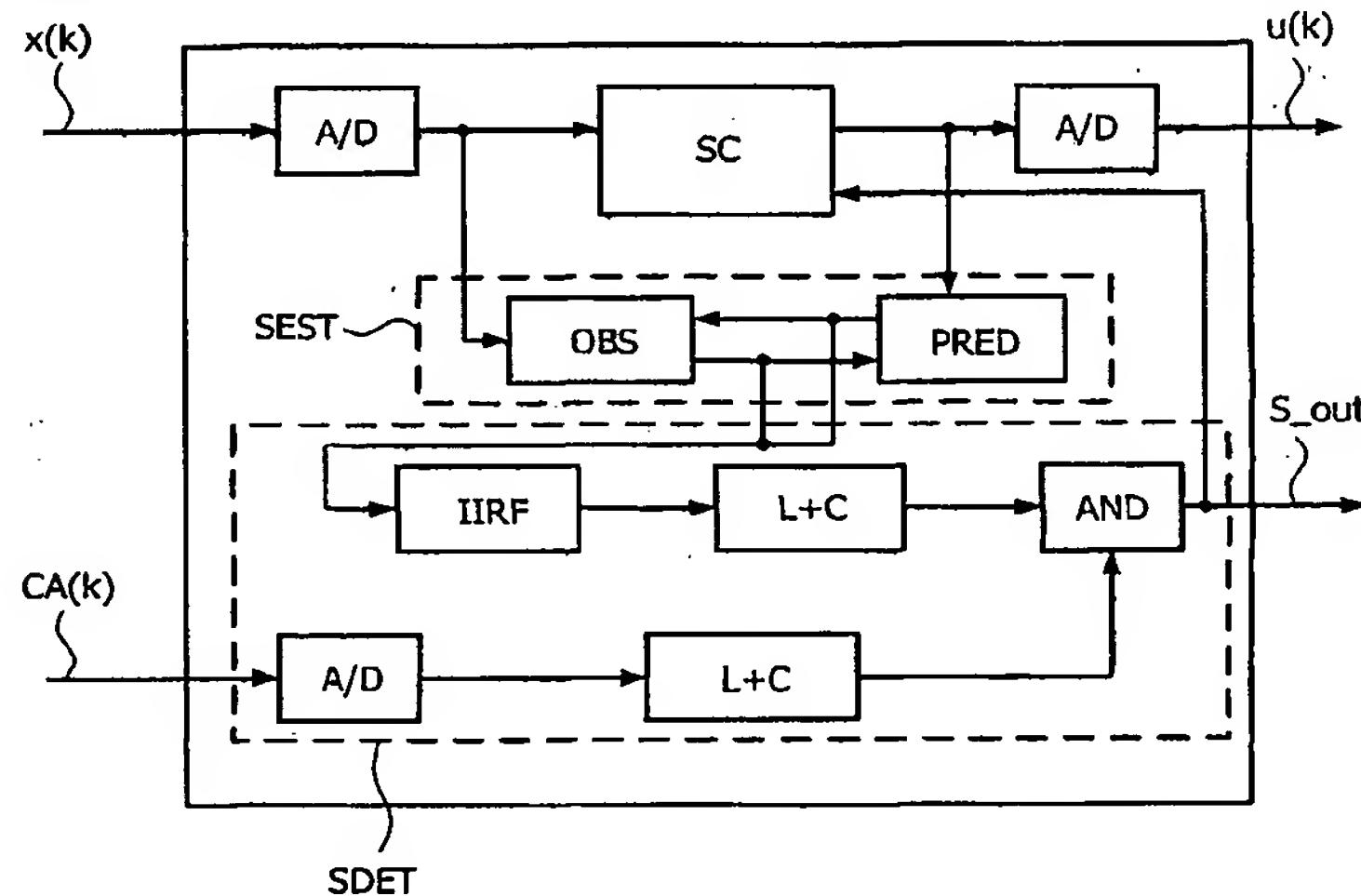
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(54) Title: ANTI-SHOCK OPTICAL RECORDING AND REPRODUCING DEVICE



(57) Abstract: The present invention relates to an optical recording and reproducing device comprising an optical pick-up unit, position means for moving roughly the optical pick-up unit with respect to a desired position on an optical disc, an actuator for moving the optical pick-up unit relative to the position means in a radial direction of the optical disc, and a servo processor for delivering a control signal ($u(k)$) from a measured radial error signal ($x(k)$) derived from the optical pick-up unit. Said servo processor further comprises: - a state estimator (SEST) for delivering an estimated radial error signal () and a predicted radial error signal () on the basis of the measured radial error signal ($x(k)$) and of the control signal ($u(k)$); and - a shock detector (SDET) for delivering a shock indication (S_{out}) on the basis of the estimated radial error signal, of the predicted radial error signal, and of a sum ($CA(k)$) of the signals delivered by at least two regions of the optical sensor.

WO 2005/081235 A1



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